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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,506	08/06/2002	Yasuo Osada	220806US6PCT	2414
22850	7590	10/07/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			CHEN, TIANJIE	
		ART UNIT	PAPER NUMBER	
		2652		
DATE MAILED: 10/07/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/088,506	OSADA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tianjie Chen	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10, 12-23, 25 and 27-35 is/are rejected.
- 7) Claim(s) 11, 24 and 26 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2,5.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

***Non-Final Rejection***

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP01/06606, filed on 07/31/2001.

***Drawings***

2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10, 12-23, 27-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohyama et al (US 5,995,467).

With regard to claims 1, 20, and 27; Ohyama et al shows a recording and/or reproducing device in Figs 9-20 including: an optical pickup 57 (Column 9, line 14) having an objective lens 78 (Column 10, line 63) and provided to be movable in the radial direction of an optical disc (Column 9, lines 26-28); a first rack portion 63 (Column 9, line 20) provided on the optical pickup; a slide member 68 (Column 9, line 51) having an opening/closing portion 76 for opening/closing a facing surface of the objective lens to the optical disc (Column 11, lines 43-49), and a second rack portion 75 (Column 10, line 15) provided to be slidable on the first rack portion; and a driving mechanism having a driving gear 64 (Column 9, lines 24-25) which meshes with the first rack portion and the second rack portion; wherein when the first and second rack portions are driven by the driving gear and the optical pickup is thus moved to a predetermined position, the meshing state of the first rack portion with the driving gear is canceled and the second rack portion is driven by the driving gear to move the slide member, thereby moving the opening/closing portion from a position for opening the facing surface side of the objective lens to a position for closing the facing surface side (Column 11, lines 50 to column 13, line 44).

With regard to claim 2, Ohyama et al shows that when the optical pickup has reached a predetermined position on the inner circle side of the optical disc, the meshing state of the driving gear with the first rack portion is canceled (Column 12, lines 61-65).

With regard to claim 3, Ohyama et al shows an inherent detecting section for detecting that the optical pickup has reached a predetermined position on the inner circle side of the optical disc (Column 12, lines 56-60).

With regard to claim 4, Ohyama et al shows the detecting section is operated by limit switch 89 cooperated with the optical pickup when the optical pickup has reached at least a position in a table-of-contents area of the optical disc (Column 11, lines 50-57).

With regard to claim 5, Ohyama et al further shows a controller (control section) (Column 12, lines 49-53) for driving a driving motor for a predetermined time period on the basis of a detection output from the detecting section.

With regard to claim 6, Ohyama et al shows that as the driving motor is driven for a predetermined time period, the optical pickup is moved further toward the inner circle side of the optical disc (Column 12, lines 61-64).

With regard to claims 7, 12, and 28; Ohyama et al shows a regulating portion 89 to which the optical pickup (moved toward the inner circle of the disk) is abutted and which is adapted for regulating the movement of the optical disc, wherein as the optical pickup is abutted against the regulating portion and has its movement regulated by the regulating portion, the meshing state of the first rack portion with the driving gear is canceled (Column 12, lines 54-60).

With regard to claims 8, 17, 21, and 33; Ohyama et al shows that at least one protrusion (the boundary between 72b and 72b (Fig. 18) is provided on the slide member and an abutment portion 67 to be abutted against the protrusion is provided on the optical pickup, and wherein as the second rack portion is moved by the driving motor in a direction such that the opening/closing portion opens the facing-surface side, thus abutting the protrusion against the abutment portion, the first rack portion is meshed with the driving gear (Column 13, lines 32-40, wherein 7"76" in line 37 should be "66 and 67" according to the figures).

With regard to claims 9, 18, 22, and 34; Ohyama et al further shows an elastic member 77 (Column 10, line 46) tensioned between the first rack portion and the second rack portion.

With regard to claims 10, 19, 23, and 35; Ohyama et al shows that as the first rack portion is meshed with the driving gear, the slide member is slid and the protrusion and the abutment portion are moved away from each other (Column 12, line 61 to column 13, line 4).

With regard to claims 13 and 29, Ohyama et al further shows that the driving motor is driven in a direction for moving the optical pickup further toward the inner circle, the second rack portion is driven and the slide member is moved, thus moving the opening/closing portion from the position for opening the facing surface side of the objective lens to the position for closing the facing surface side (Column 12, line 61 to column 13, line 4).

With regard to claims 14 and 30, Ohyama further shows when the optical pickup has been moved to at least a position in a table-of-contents area of the optical disc, the driving motor is driven for a predetermined time period in the direction for moving the optical pickup further toward the inner circle (Column 12, lines 61-67).

With regard to claims 15 and 31, Ohyama et al shows a detecting section for detecting that the optical pickup has been moved to at least a position in the table-of-contents area of the optical disc, and a control section for driving the driving motor for a predetermined time period in the direction for moving the optical pickup further toward the inner circle, on the basis of the detection result from the detecting section (Column 12, lines 24-53).

With regard to claims 16 and 32, Ohyama et al shows that the control section inherits a timer circuit for timing the predetermined time period (Column 12, lines 49-62).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama et al in view of Wu (US 6,366,551).

With regard to claim 25, Ohyama et al shows a guide portion 58 and etc. for guiding the movement of the optical pickup section in the radial direction of the optical disc, wherein the guide portion has a supporting shaft 58 for guiding the optical pickup section.

Ohyama et al does not show a reference portion abutted at least at two positions of an outer circumferential portion of the supporting shaft for positioning the supporting shaft, an engagement portion engaged with the outer circumferential portion of the supporting shaft, and an elastic displacement portion formed integrally with the engagement portion for energizing the engagement portion in the radial direction of the supporting shaft.

Wu shows a supporting shaft in Figs 2A-2C, which has a reference portion 60 abutted at least at two positions (with 512a and 512b, respectively) of an outer

circumferential portion of the supporting shaft for positioning the supporting shaft, an engagement portion 511 engaged with the outer circumferential portion of the supporting shaft, and an elastic displacement portion 70 formed integrally with the engagement portion for energizing the engagement portion in the radial direction of the supporting shaft.

It will be obvious at the time the invention was made to one of ordinary skill in the art to add the structure taught by Wu into Ohyama et al's device in order to be able to adjust the tilt angle ((Column 1, lines 6-9).

#### ***Allowable Subject Matter***

5. Claims 11, 24, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

- With regard to claim 11 and 24, as the closest reference, Ohyama et al (US 5,995,467) shows that the optical pickup further has a cover 80 which has an aperture 82 formed therein at a position facing the objective lens and which is adapted for at least covering the objective lens, **but fails to show** wherein the opening/closing portion 76 **moves on** the cover between the position for opening the facing surface and the position for closing the facing surface, thereby opening/closing the aperture.

Applicant discloses that the opening/closing portion is an opening/closing plate 58, which is integrated on the slider (Fig. 7) and it moves on the cover; therefore, it is possible to precisely control the operation of opening/closing the aperture for the lens (Specification, p. 31, line 1-3).

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- With regard to claim 26, as the closest reference, Ohyama et al (US 5,995,467) shows an elastic displacement portion in guiding system, **but fails to show** the elastic displacement portion is bent from a direction substantially parallel to the axial direction of the supporting shaft to a direction substantially orthogonal to the axial direction of the supporting shaft, thereby energizing the engagement portion in the radial direction of the supporting shaft.

Applicant shows this structure in Fig. 9, and assets that by using this arrangement, no looseness due to any vibration or shock is generated in the engagement portion for supporting the shaft and the supporting shaft can be securely fixed (Specification p. 20, lines 16-18).

### ***Conclusion***

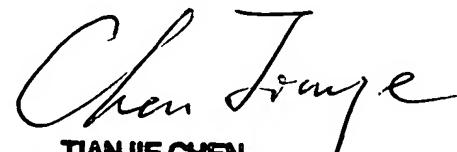
6. The prior art made of record in PTO 892 Form and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is (703) 305-7499. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TIANJIE CHEN**  
**PRIMARY EXAMINER**